QUARTERLY JOURNAL
of the
FLORIDA ACADEMY OF SCIENCES

VOLUME 30

Editor
PIERCE BRODKORB

Published by the

FLORIDA ACADEMY OF SCIENCES
Gainesville, Florida
1967

Publication Dates of Volume 30

Number 1: April 16, 1968

Number 2: July 24, 1968

Number 3: September 20, 1968

Number 4: December 24, 1968

New Taxa Proposed in Volume 30

Cleidodiscus georgiensis Price (Trematoda: Dactylogyridae) 64

Dactylogyrus jaini Price (Trematoda: Dactylogyridae) 111

Centrolenella taylori Goin (Amphibia: Centrolenidae) 115

†*Acris barbouri* Holman (Amphibia: Hylidae) 128

†*Hyla miofloridana* Holman (Amphibia: Hylidae) 132

†Fossil

CONTENTS OF VOLUME 30

NUMBER 1

Interferometry of Jupiter at 18 Mc/s — *Jorge May and Thomas D. Carr* 1

Effect of Hurricane Betsy on the southeastern Everglades — *Taylor R. Alexander* 10

Fishes of the St. Johns River, Florida — *Marlin E. Tagatz* 25

Composition and feed value of shrimp meal — *W. G. Kirk, R. L. Shirley, J. F. Easley, and F. M. Peacock* 51

Animal remains from a midden at Fort Walton Beach — *Elizabeth S. Wing* 57

Fossil vertebrates from Navassa Island, W.I. — *Thomas H. Patton* 59

Notes on the trematode genera *Cleidodiscus* and *Urocleidus* — *C. E. Price* 61

Aerial respiration in the Florida spotted gar — *Brian McCormack* 68

Invertebrates found in water hyacinth mats — *James O'Hara* 73

NUMBER 2

Rainfall distribution in the Miami area — *Louis C. Sass* 81

Two ancient Florida dugout canoes — *Ripley P. Bullen and Harold K. Brooks* 97

Variation in plantar tubercles in *Peromyscus polionotus* — *Michael H. Smith* 108

A new gill trematode from Georgia — *Charles E. Price* 111

A new centrolenid frog from Guyana — *Coleman J. Goin* 115

Behavior of iguana during rain storms — *Coleman J. Goin* 119

Additional Miocene anurans from Florida — *J. Alan Holman* 121

Variation in bovine cholinesterase levels — *C. J. Wilcox and H. H. Head* 141

Officers and members of the Academy 145

Number 3

Differential thermal analysis of wavellite — *Frank N. Blanchard* — 161

Effects of gamma irradiation on prickly pear cactus — *Carl D. Monk* — 168

Notes on *Balanus humilis* Conrad, 1846 — *Arnold Ross* — 173

Spawning season and sex ratio of echinoids — *John W. Brookbank* — 177

Sleep behavior in frogs — *J. Allan Hobson, Coleman J. Goin, and Olive B. Goin* — 184

New records of fishes from the western Caribbean — *Ray S. Birdsong and Alan R. Emery* — 187

Cuban lizards of the genus *Chamaeleolis* — *Orlando H. Garrido and Albert Schwartz* — 197

Natural factors affecting deer movements — *Richard F. Harlow and William F. Oliver, Jr.* — 221

Round-tailed muskrat in west-central Florida — *John R. Paul* — 227

Mating behavior of *Peromyscus polionotus* — *Michael H. Smith* — 230

Number 4

Effectiveness of family psychotherapy — *Sidney B. Denman* — 241

Morphological variations of *Gymnodinium breve* in situ — *Alexander Dragovich* — 245

Chinsegut Hill-McCarty Woods, Hernando County, Florida — *Stephen L. Beckwith* — 250

Relationship of sand pine scrub to former shore lines — *A. M. Laessle* — 269

Sea turtle nest survey of Hutchinson Island, Florida — *Robert A. Routa* — 287

Yolk pigmenting value of dried kenaf tops — *Jack L. Fry, George M. Herrick, and R. H. Harms* — 295

Persistent viremia in EIA infected horses — *J. H. Flynn, G. H. Waddell, and V. R. Saurino* — 301

Temperature and humidity effects on survival of chickens — *R. W. Dorminey, H. R. Wilson, I. J. Ross, and J. E. Jones* — 316